

DEQ

Nuisance Odor Strategy

Submitted to: Dick Pedersen

By: DEQ Nuisance Improvement Team

August 2013



State of Oregon
Department of
Environmental
Quality

Air Quality Division
811 SW 6th Avenue
Portland, OR 97204
Phone: (503) 229-5696
(800) 452-4011
Fax: (503) 229-6762
Contact: Sarah Armitage
www.oregon.gov/DEQ

DEQ is a leader in restoring,
maintaining and enhancing
the quality of Oregon's air,
land and water.



This report prepared by:

Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204
1-800-452-4011
www.oregon.gov/deq

Contact: Sarah Armitage
503-229-5186

Alternative formats (Braille, large type) of this document can be made available. Contact DEQ's Office of Communications & Outreach, Portland, at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696.

Table of Contents

Executive Summary.....	4
1. Introduction	4
1.1 Background	4
1.2 Scope and timing of the effort	5
1.3 The need to prioritize and phase-in a nuisance strategy	6
2. Research on and evaluation.....	6
of other state nuisance odor programs	6
2.1 Evaluation of odors	7
2.2 Evaluation of source’s ability to control odor	7
2.3 Conclusion	8
3. Nuisance strategy.....	8
3.1 Use of the strategy	8
3.2 Phase one: early investigation and resolution	9
3.2.1 Intaking complaints.....	9
3.2.2 Contacting the source after the initial complaint	9
3.2.3 Documenting and evaluating further complaints	10
3.2.4 Preparing for a site inspection	11
3.2.5 Performing a site inspection	11
3.2.6 Informally negotiating with the source for odor abatement	12
3.3 Phase two: suspected nuisance determination and notice to the source	12
3.3.1 Submitting a suspected nuisance determination form to DEQ’s.....	12
Nuisance Panel.....	12
3.3.2 Deciding whether to issue a notice of suspected nuisance	13
3.3.3 Sending a notice of suspected nuisance and inviting the source to negotiate a Best Work Practices Agreement	13
3.4 Phase three: negotiating an odor abatement agreement and related compliance actions	13
3.4.1 Negotiating a Best Work Practices Agreement	13
3.4.2 Enforcing the Best Work Practices Agreement	14
3.4.3 Refer the source to Office of Compliance and Enforcement	15
Appendix A	16

Executive Summary

Emissions to the land, air or water can result in nuisance conditions that substantially and unreasonably interfere with individual use and enjoyment of real property. DEQ regulations prohibit regulated facilities or sources from creating nuisance conditions. In recent years, DEQ has received increasing numbers of nuisance odor complaints due to increasing density and close proximity of residential, commercial and industrial uses.

In April 2013, DEQ assembled an agency team to develop an improved strategy for investigating, analyzing and responding to odor complaints and nuisance odor conditions. DEQ drafted a strategy based on existing regulations for odor complaints from permitted facilities. Between May and July 2013, DEQ gathered public input on the nuisance strategy, considered the input from all parties and finalized the strategy in this document. While any nuisance odor approach includes evaluating conditions that can be difficult to measure, the nuisance odor strategy will increase objectivity and consistency through well-defined steps that support decision-making and understanding.

1. Introduction

1.1 Background

DEQ receives a number of complaints and inquiries every day related to various sources of odor, including business activities and regulated facilities. These sources vary from neighborhood restaurants to large industrial operations. Odor sources in Oregon that generate the most complaints include facilities using volatile compounds in paint or solvents, composting, landfills, pulp and paper mills, wood preserving or creosoting operations and land application of biosolids. Biosolids are the nutrient-rich organic by-product of domestic wastewater treatment.

This nuisance strategy implements existing rules that were last updated in a process improvement effort in 2001. The Oregon Administrative rule on nuisance (OAR 340-208-0310) (Appendix A) describes multiple factors for DEQ to consider when determining if a nuisance exists. They include but are not limited to:

- Frequency of the emission
- Duration of the emission
- Strength or intensity of the emissions, odors or other offending properties
- Number of people impacted
- The suitability of each party's use to the character of the locality in which it is conducted
- Extent and character of the harm to complainants
- The source's ability to prevent or avoid harm.

In 2009, DEQ received a legal opinion from the Oregon Attorney General stating that the

nuisance rules are enforceable and likely to withstand a legal appeal if DEQ develops procedures to document and evaluate odors and their impacts. Identifying nuisance odors is inherently subjective and odors may be sensed as objectionable at concentrations below monitoring detection equipment limits or practical control levels. DEQ recognizes that the nuisance strategy will not eliminate odors and the goal is to ensure that sources causing nuisance odors are taking reasonable measures to mitigate them. The nuisance strategy ensures DEQ staff responds to, monitors, tracks and investigates odor complaints and enforces against nuisance odors fairly and consistently across the state.

1.2 Scope and timing of the effort

Current odor concerns with the greatest impact on Oregon communities are related to conditions at commercial and industrial facilities operating under DEQ air, water or waste permits. To focus on these concerns first, DEQ limited the scope of work to improving the nuisance process to odor from permitted facilities. Even with this limitation, potential sources of odor complaints still include several thousand DEQ permitted facilities.

Hundreds of those sources have potential odor emissions including pulp and paper mills, wood preserving, steel foundries, painting operations, fiberglass manufacturing, coffee roasters, ethanol plants, asphalt plants, food processing, landfills, composting facilities, wastewater treatment plants, and biosolids land application sites. The nuisance strategy may be expanded as needed to include other types of non-permitted sources.

Separate rules and enforcement procedures are already in place for open burning and dust violations, so these are not addressed by this strategy. Noise complaints are outside of the scope of this strategy effort because DEQ, upon Legislative direction, terminated the Noise Control Program in July 1991 as an agency cost-savings measure due to reduction in General Fund support. Agricultural operations are generally not within the scope of this strategy unless they are activities specifically permitted by DEQ.

Concerns about odors from permitted sources often prompt additional concerns about the potential health effects or toxicity of odorous chemicals. While some air pollutants with more serious health effects, known as air toxics, are odorous, most of the air toxics of concern in Oregon cannot be detected by smell. DEQ's programs to address toxic pollution in the air, land and water are distinct from the nuisance odor strategy. The proposed nuisance strategy is not intended to control or reduce toxic pollutants. However odor control measures may result in co-benefits for reducing an array of non-odorous pollution to land, air and water.

An internal team of senior staff from DEQ's water, air and waste programs met in April 2013 to develop a more comprehensive and specific process for implementing DEQ's existing nuisance rules. The team's goal was to develop a reliable and defensible way to apply DEQ's nuisance program, including steps for staff to:

- Monitor, track and respond to odor complaints;
- Identify facilities causing nuisance conditions;
- Determine appropriate nuisance abatement; and
- Track nuisance abatement measures and determine whether nuisance emissions have been adequately addressed.

Using process improvement tools, the team analyzed current nuisance rule implementation problems and developed proposed steps and solutions to support more objective, consist analysis and decision-making. The strategy details steps in three phases:

- Early investigation and resolution;
- Suspected nuisance determination and notice; and
- Negotiating an odor abatement agreement and related compliance actions.

Between May 15th and June 17th, 2013, DEQ gathered public input on the draft nuisance strategy and met with interested parties upon request. DEQ carefully considered all input and made revisions as needed to complete this final nuisance odor strategy. DEQ will train managers and staff on the nuisance strategy and plans to begin implementing it in fall 2013.

1.3 The need to prioritize and phase-in a nuisance strategy

DEQ's nuisance odor strategy maximizes agency resources by prioritizing work on odor problems with the largest impacts on communities. The strategy provides tools to evaluate and prioritize each situation before proceeding to more resource intensive stages of full inspection and enforcement actions. It is DEQ's goal to facilitate resolution of the majority of odor complaints in early pre-enforcement stages with cooperative voluntary remedies. This approach is designed to increase efficiency and achieve a high level of mutual satisfaction among sources, complainants and DEQ. DEQ has incorporated staff's use of voluntary resolution "off ramps" throughout the process. When voluntary resolution is not possible, the strategy recommends clear and more detailed steps to follow up with enforcement action.

DEQ recognizes that the nuisance odor strategy may enhance public awareness and result in an increase in odor or nuisance complaints. DEQ will not be able to respond to a high number of nuisance complaints in a short period of time, and will need to plan responses over a longer period if there is a large volume of complaints. However, DEQ anticipates that tools for early evaluation and resolution of nuisance odors will be efficiently applied to source complaint situations statewide, speeding response to some complaints.

2. Research on and evaluation of other state nuisance odor programs

To develop a nuisance odor strategy, DEQ researched and evaluated nuisance odor programs and approaches in other states. The topics researched included state regulations, state guidance policies regarding inspections and enforcement, odor measurement technology, use of nuisance standards and criteria, and methods for evaluating appropriate odor abatement methods.

After looking at many different programs, DEQ contacted and interviewed state employees in Washington, Idaho, Texas, Missouri, Colorado, Connecticut, Maine, and Massachusetts to gain an overall sense of the different possible approaches to regulating nuisance odors.

Some states provided detailed written guidance policies on how to interpret the applicable rules, while other states have no written guidance and instead provided verbal or written explanations of how they interpret their rules.

All the states surveyed – including Oregon – have very similar rules on nuisance odors, and a common requirement is that a source may not generate odors that cause an unreasonable interference with another's enjoyment of their property. The states therefore had to choose what criteria and methods to use to measure or evaluate the odors themselves, as well as the extent to which the source is capable of preventing or minimizing the odors.

2.1 Evaluation of odors

States expressed three primary approaches to odor evaluation: odor intensity scales, the use of olfactometers otherwise known as scentometers, and setting specific limits on specific pollutants. DEQ's research indicated a clear trend toward the use of odor intensity scales, and away from the use of technology-based methods such as scentometers that attempt to evaluate odors by recording the level of dilution required to bring the odor to a concentration threshold below which it can no longer be detected.

In general, states that authorize the use of scentometers reported they are not satisfied with them because performance can vary with weather conditions, decreasing consistency and reliability. Based on this, DEQ staff will not use scentometers. Finally, some states have set specific limits for pollutants such as hydrogen sulfide and use monitors to gather this data. This approach could provide an objective tool when analyzing sources of hydrogen sulfide, which can be found at pulp mills and landfills. DEQ may consider a hydrogen sulfide standard in a future rule revision, however there are thousands of odorous compounds that are difficult to measure, so this approach would only partially address nuisance odor.

For these reasons, and because this effort is focused on implementing the existing nuisance regulations, DEQ's strategy documents qualities such as the frequency, duration, strength and offensiveness of an odor. Inspectors assign values to each of these qualities and draw conclusions from this data when evaluating the overall quality of an odor. A number of states employ a scale whereby odors of greater duration and frequency are more likely to be considered nuisance odors than similar odors of lesser duration and frequency, and DEQ has incorporated this approach in part.

2.2 Evaluation of source's ability to control odor

Oregon's rules on nuisance allow DEQ to consider the source's ability to prevent or avoid harm when determining whether or not a source's odor is causing a nuisance condition. DEQ's research concluded that states do not have detailed or concrete rules or guidance policies concerning how to evaluate the extent to which a source is able to control allegedly offensive odors.

In general, states approach each source on a case-by-case basis and ask the source to generate a written proposal including a full range of options for controlling the odor.

That proposal is the basis for negotiations as it should include all the information the state will use to determine the extent to which the source is able to prevent or avoid the harm caused by the odor. If a source provides a credible explanation as to why an odor control measure is unreasonable, the state will evaluate that explanation and ultimately make a decision based on all available information. Ideally, the source will formally agree to implement odor control measures that abate the odor to the point where the odor is no longer considered a nuisance. However, there are situations where odors cannot be completely eliminated.

DEQ's rules contemplate a highly similar approach. The rules allow a source suspected of causing a nuisance odor to voluntarily enter into a Best Work Practices Agreement with the agency, the conditions of which would be incorporated into the source's permit as applicable, thereby becoming enforceable. DEQ will request that a source suspected of causing a nuisance odor submits a complete nuisance odor abatement proposal. An acceptable proposal will specify levels of potential odor control measures, taking into account factors including but not limited to cost, effectiveness, timeline for implementation and normal industry practice. The information provided by the source then becomes the basis for determining the source's ability to control its odor.

2.3 Conclusion

DEQ's research provided the alternative approaches for the regulation of nuisance odor. By contacting current employees of other state environmental agencies DEQ was able to ask questions about the effectiveness of the procedures and criteria when they are employed in different situations. In doing this research, DEQ has learned of scenarios and obstacles other states have already faced, and developed a strategy for nuisance odor regulation best suited for Oregon.

3. Nuisance strategy

3.1 Use of the strategy

This strategy is generally applicable only to sources permitted by DEQ, and provides a method for prioritizing DEQ's response to odor nuisances with the greatest impacts. In addition, DEQ's goal is to facilitate resolution of the majority of odor complaints in early pre-enforcement stages with cooperative voluntary remedies. With this approach DEQ increases efficiency and strives to achieve a high level of mutual satisfaction among sources, complainants and the agency. This strategy also provides staff with clear, detailed direction for follow up enforcement action in situations where significant nuisance conditions are not resolved.

Based on their small size and generally limited level of impact, DEQ has determined the following sources are lower priority and not usually addressed by this strategy:

- Auto body businesses;
- Sources with general or basic Air Contaminant Discharge permits under OAR 340-216-

- 0025 (except for asphalt batch plants);
- Solid waste transfer stations;
- Solid waste material recovery or recycling facilities.

Several general considerations apply to the entire strategy:

- If at any time DEQ determines the odor has ceased and is not likely to reoccur, the investigation and other response actions will be discontinued.
- DEQ will document communications and investigations thoroughly and objectively.
- DEQ will not assume violations based solely on the existence of complaints, and will only take follow up steps when it independently determines the source of the odor. However, DEQ will communicate with potential odor sources shortly after receiving a complaint to keep them informed. In some cases this may lead to early and informal resolution of the complaints.
- If DEQ staff finds that a municipal waste water treatment plant has an established system for receiving and responding to complaints, they will provide the source an opportunity to resolve the odor problem using its own system.

3.2 Phase one: early investigation and resolution

3.2.1 Intaking complaints

In 2011, DEQ launched an improved state-wide environmental complaint system in which complaint intake specialists receive and log all complaints in a database before referring them to staff for follow up and resolution. After initial intake, DEQ will contact the complainant to first determine if the likely source of the odor is within the scope of the nuisance strategy. If not, DEQ will inform the complainant that the agency will not proceed further with the investigation and suggest other agencies that may be able to assist. Options could include neighborhood mediation programs, local land use authorities, neighborhood associations and good neighbor agreements between sources and residents. DEQ anticipates that after higher priority sources have been addressed, and resources allow, staff may proceed to investigate lower priority sources.

If the likely source of the odor is within the scope of this strategy or still unknown, DEQ will ask the complainant to provide detailed information about the odor in a telephone interview or an online form.

3.2.2 Contacting the source after the initial complaint

After gathering information from one or more complainants, DEQ will contact the appropriate person at the source complainants have identified as causing the odor. DEQ will contact the source to inform the operators about the complaints and find out if they have any knowledge of the odor or the potential source of the odor. If after careful evaluation staff finds that the source is likely causing the odor, they will investigate whether the odor is related to normal facility operations or an upset or unusual condition not likely to reoccur. The goal at this stage is to identify the actual source of the odor, and resolve the odor issue informally and quickly, or to determine that there is a credible explanation for a short-term odor that will not continue.

3.2.3 Documenting and evaluating further complaints

If complaints about the same odor continue and DEQ documents ten complaints from different individuals with separate addresses over a 60 day period for an odor that reoccurs in the same general location, staff is generally advised to proceed to the next step of completing a more thorough odor investigation. Based on experience implementing this strategy, DEQ may revise these prioritization criteria, including considerations for areas with low population density.

DEQ will evaluate odor frequency, duration, strength, and offensiveness as reported by complainants using Tables 1 and 2. The factors rated on these tables help staff decide when a potential nuisance odor is more significant and will also help DEQ assess the relative impact of odor complaints over time.

Duration	12+ hrs. (4)	5	7	9	11
	6-12 hrs. (3)	4	6	8	10
	1-6 hrs. (2)	3	5	7	9
	Less than 1 hr (1)	2	4	6	8
		Annually (1)	Monthly (3)	Weekly (5)	Daily (7)

Frequency

Table 1, Frequency and Duration Matrix

Strength	Overwhelming (4)	5	7	9	11
	Strong & pervasive (3)	4	6	8	10
	Definite & distinct (2)	3	5	7	9
	Barely detectable (1)	2	4	6	8
		Not unpleasant (1)	Unpleasant (3)	Offensive (5)	Highly offensive (7)

Offensiveness

Table 2, Strength and Offensiveness Matrix

If the combined total values of the two frequency/duration and strength/offensiveness tables reach an average value of 14 or greater the potential odor investigation will be considered higher priority and staff is generally advised to proceed with a site inspection. If the combined average value of the two tables is below 14, the investigation will be considered lower priority and DEQ will be less likely to proceed with a site inspection. If the inspection will not proceed, the agency will notify complainants and document this decision. After resolving higher priority investigations DEQ may decide to proceed with lower priority investigations at its discretion and as resources allow. Based on experience implementing the nuisance strategy, DEQ may revise these criteria.

3.2.4 Preparing for a site inspection

Before a site inspection, DEQ will gather information from complainants or other agencies - such as local health, licensing and land use departments - to determine the best time to detect and evaluate the odor in question. Considerations include weather conditions and likely times that potential source activities could be contributing to odor conditions.

DEQ will inform the source about the complaints and ask about current operations, recent changes, or upset conditions. DEQ will consider doing an unannounced inspection, but otherwise will arrange a site visit with the source's cooperation and/or participation. DEQ will gather information about the source and its activities by reviewing any relevant air, water, and land quality program files and databases, the DEQ complaint database, neighboring land use, weather conditions and site terrain features including updraft, downdraft and channeling. DEQ will also gather information on other sources in the area that could be causing the odors.

3.2.5 Performing a site inspection

To ensure a detailed inspection, DEQ will use a specific form for odor inspections and complete a detailed report to the fullest extent possible. The goal is to document the quality of the odor and the area affected by the odor, as well as to gather evidence to determine if the odor is caused by a specific source or sources. Information collected in the inspection should be complete and accurate enough to support issuing a Notice of Suspected Nuisance to the source or multiple sources if needed. When investigating a potential nuisance case, DEQ will consider all seven nuisance factors described in OAR 340-208-0310(1).

For staff performing odor inspections, DEQ will provide initial and periodic training to evaluate odors and odor intensity based on the Odor Intensity Referencing Scale (OIRS) from ASTM E544. Odor intensity referencing compares the odor in the ambient air to the odor intensity of a series of concentrations of a reference odorant. The reference odorant DEQ will utilize is n-butanol, and the odor intensity value of a given odor will be expressed in parts per million (PPM) of n-butanol. DEQ inspectors will document the intensity of a given odor using a 5 point scale.

The proposed odor nuisance strategy includes best practices for performing an odor inspection, including the following:

- Use two or more staff as an inspection team for a more accurate assessment

of odor conditions.

- Evaluate the odor from as many locations as necessary to positively identify:
 - the odor in question;
 - the source causing the odor;
 - the activity of the source causing the odor; and
 - the area being affected by the odor.
- If multiple sources are potentially causing the odor, document and explain this finding.

Requesting that complainants and source representatives accompany DEQ staff on inspections may help to build a common and more detailed understanding of odor situations. When this benefit is possible, staff will consult with their managers and exercise their discretion to allow complainants, source representatives or both on specially designated inspections. Multiple inspections, at different times, may be required to positively identify the source and, to the extent possible, the area generally affected by the odor. Complaints will also be used to determine the affected area. If the source of the odor can't reasonably be determined or has disappeared, DEQ will notify complainants and the source that the investigation will not continue at this time. If the odor complaints arise again in the future the investigation may be reopened at the discretion of the inspector.

If the investigation results in a conclusion that there are multiple sources contributing to a nuisance condition, DEQ will request information from each source with the goal of having a source either verify its contribution to the odor in question, or provide evidence it is not causing the odor. If a source can clearly demonstrate it is not causing the nuisance odor, DEQ will document this determination and provide the information to other potentially responsible sources.

3.2.6 Informally negotiating with the source for odor abatement

After performing a thorough site inspection, DEQ will likely have a better understanding of the nature and cause of the odor complaint. This is an opportune time to informally request that the source take action to resolve the odor complaints. If a source is willing to voluntarily enter into a Best Work Practices Agreement, DEQ will attempt to negotiate the agreement with input from the complainants. Whenever possible, DEQ will also request that the source negotiate directly with the complainants and/or neighbors to develop draft conditions for a Best Work Practices Agreement. If negotiations do not lead to an agreement, and the odor is likely to continue, DEQ will proceed with the action by determining whether to send a Notice of Suspected Nuisance to the source.

3.3 Phase two: suspected nuisance determination and notice to the source

3.3.1 Submitting a suspected nuisance determination form to DEQ's Nuisance Panel

Once inspectors have completed their investigation, including consideration of complaints and information submitted by the source, they will prepare a referral for the Nuisance Panel. This panel will be comprised of DEQ senior or executive managers who will assist with the final decision about whether to issue the source a Notice of Suspected Nuisance. In doing so, they will consider documentation provided by staff, resource availability, and the seven nuisance factors

described in OAR 340-208-0310(1).

3.3.2 Deciding whether to issue a notice of suspected nuisance

DEQ's Nuisance Panel will review the suspected nuisance referral and evaluate whether it contains sufficient evidence to support a suspected nuisance determination under OAR 340-208-0310. The Panel will make its evaluation within three weeks of receiving the referral, and DEQ will inform the source of its anticipated next steps within one week of that decision.

3.3.3 Sending a notice of suspected nuisance and inviting the source to negotiate a Best Work Practices Agreement

If the Nuisance Panel believes a nuisance may exist, and so directs, DEQ will issue a notice of suspected nuisance to a source and provide a copy to the complainant under OAR 340-208-300(2). DEQ's notice will include at least the following:

- A request that the source reply in writing within twenty days from the date of the notice, agreeing to enter into negotiations to arrive at a Best Work Practices Agreement. The deadline may be extended upon showing of good cause.
- A statement that the source will be referred for enforcement if it does not either timely agree to pursue a Best Work Practices Agreement or timely submit a complete proposal.
- A proposed deadline for submission of a complete nuisance abatement proposal two months from the date the source agrees to enter into formal negotiations. This deadline may be extended upon showing of good cause.
- A statement that an acceptable proposal will: (i) include immediate, short term, and long term abatement measures, as applicable (ii) address the effectiveness, cost, and implementation timelines of each measure, and (iii) include an evaluation of measures the source considers unreasonable, along with an explanation.

If the source submits a complete proposal, DEQ will review the proposal and enter into formal negotiations. If the source submits an incomplete proposal within the deadline, DEQ will send a letter requesting the source to submit a complete proposal by a second deadline. If agreement is reached, the terms of the agreement will be formalized in a DEQ order. If the source does not submit a proposal, DEQ will refer the matter to the agency's Office of Compliance and Enforcement for enforcement of nuisance regulations in OAR 340-208-0300 and 0310. If DEQ initiates a formal enforcement action, the source that DEQ alleges to be causing a nuisance condition will have the opportunity to challenge DEQ's findings and conclusions in a contested case hearing as provided in OAR Chapter 137, Division 3 and Chapter 340, Division 11.

3.4 Phase three: negotiating an odor abatement agreement and related compliance actions

3.4.1 Negotiating a Best Work Practices Agreement

After determining the source's proposal is complete, DEQ will contact complainants and arrange for them to review the proposal. The source will not be required to negotiate directly with complainants, although DEQ encourages the source and complainants to

pursue voluntary negotiations.

Using the source's proposal as a basis, and taking into account feedback from complainants, DEQ will draft a Best Work Practices Agreement, similar to a permit, with measurable parameters, deadlines, and requirements. The Agreement will be a Final Order issued by DEQ. The order will be enforceable and violations would be potentially subject to civil penalties.

The Agreement may include progressive or tiered levels of control. The Agreement may also specify that higher and more intensive odor control measures are required if the initial measures do not sufficiently abate the odor.

In negotiating an Agreement, DEQ will evaluate the range of industry practices, including all feasible methods of controlling the odor. DEQ will also take into consideration the frequency, duration and strength of the odor. Sources that propose more complete and progressive plans to control odor may receive longer timeframes for their Agreements. Sources that propose basic or incomplete measures should receive shorter timeframes for their agreements. DEQ will evaluate the cost of various odor control measures in comparison to the extent the odor is unreasonably impacting the activities of those adversely affected by the odor. If there is significant disagreement between complainants and the source or DEQ and the source, DEQ will draft a recommended Agreement and refer the issues to the nuisance panel for approval before moving forward.

DEQ will draft the Agreement and consult with appropriate complainants to gather their comments. After complainant comments are reviewed and/or incorporated into the draft Agreement, DEQ will deliver it to the source to review, and provide a deadline by which the source must provide comments. DEQ will ultimately decide on the content of the agreement.

Once the source agrees to sign the Agreement, DEQ can consider the situation to be resolved as long as the source complies with the Agreement requirements for the period of time specified in the order. For sources subject to OAR 340-216-0020 or 340-218-0020, the conditions outlined within the Agreement will be incorporated into the source's permit at the next renewal or modification pursuant to OAR 340-208-0320(2).

If the source does not agree to sign the Best Work Practices Agreement, DEQ will terminate negotiations and refer the case to the agency's Office of Compliance and Enforcement for enforcement.

3.4.2 Enforcing the Best Work Practices Agreement

If DEQ finds out that the source is failing to properly implement a condition of the Agreement, the agency will send a letter requesting immediate compliance. If the source still does not comply with the Agreement, DEQ will refer the case to the Office of Compliance and Enforcement for enforcement. The Agreement can be ended if it is no longer needed because the source changed its underlying process such that it no longer generates nuisance odors.

3.4.3 Refer the source to Office of Compliance and Enforcement

If DEQ has informed a source of its determination that the source is a suspected nuisance and the source has failed to enter into an Agreement, or a source has clearly violated the conditions of an Agreement, DEQ will refer the source to the agency's Office of Compliance and Enforcement for enforcement. The Office of Compliance and Enforcement will draft a Notice of Civil Penalty and Order to Comply requiring the source to propose and/or implement all reasonably available odor control measures.

Appendix A

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 208

VISIBLE EMISSIONS AND NUISANCE REQUIREMENTS

340-208-0010

Definitions

The definitions in OAR 340-200-0020 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020, the definition in this rule applies to this division.

(1) "Abate" means to eliminate the nuisance or suspected nuisance by reducing or managing the emissions using reasonably available practices. The degree of abatement will depend on an evaluation of all of the circumstances of each case and does not necessarily mean completely eliminating the emissions.

(2) "Air Contaminant" means a dust, fume, gas, mist, odor, smoke, pollen, vapor, soot, carbon, acid or particulate matter, or any combination thereof.

(3) "Emission" means a release into the outdoor atmosphere of air contaminants.

(4) "Fuel Burning Equipment" means a boiler or process heater that burns a solid, liquid, or gaseous fuel, the principal purpose of which is to produce heat or power by indirect heat transfer.

(5) "Fugitive Emissions" means emissions of any air contaminant that escape to the atmosphere from any point or area not identifiable as a stack, vent, duct, or equivalent opening.

(6) "New source" means, for purposes of OAR 340-208-0110, any air contaminant source installed, constructed, or modified after June 1, 1970.

(7) "Nuisance" means a substantial and unreasonable interference with another's use and enjoyment of real property, or the substantial and unreasonable invasion of a right common to members of the general public.

(8) "Odor" means that property of an air contaminant that affects the sense of smell.

(9) "Special Control Area" means an area designated in OAR 340-204-0070.

(12) "Standard conditions" means a temperature of 68° Fahrenheit and a pressure of 14.7 pounds per square inch absolute.

(13) "Standard cubic foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions. When applied to combustion flue gases from fuel, "standard cubic foot" also implies adjustment of gas volume to that which would result at a concentration of 12% carbon dioxide or 50% excess air.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 468 & 468A

Stats. Implemented: ORS 468.020 & 468A.025

Hist.: [DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 1-1984, f. & ef. 1-16-84; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96]; [DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96]; [DEQ 4-1978, f. & ef. 4-7-78; DEQ 9-1979, f. & ef. 5-3-79; DEQ 3-1980, f. & ef. 1-28-80; DEQ 14-1981, f. & ef. 5-6-81; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 3-1996, f. & cert. ef. 1-29-96]; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0005, 340-021-0050, 340-030-0010; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 8-2007, f. & cert. ef. 11-8-07

Visible Emissions

340-208-0100

Applicability

OAR 340-208-0100 through 340-208-0110 apply in all areas of the state.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0012

340-208-0110

Visible Air Contaminant Limitations

(1) Existing sources outside special control areas. No person may emit or allow to be emitted any air contaminant into the atmosphere from any existing air contaminant source located outside a special control area for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 40% opacity.

(2) New sources in all areas and existing sources within special control areas: No person may emit or allow to be emitted any air contaminant into the atmosphere from any new air contaminant source, or from any existing source within a special control area, for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 20% opacity.

(3) Exceptions to sections (1) and (2) of this rule:

(a) Where the presence of uncombined water is the only reason for failure of any source to meet the requirement of sections (1) and (2) of this rule, such sections shall not apply;

(b) Existing fuel burning equipment installed on or before June 1, 1970 that has not been modified since June 1, 1970 utilizing wood wastes and located within special control areas shall comply with the emission limitations of section (1) of this rule in lieu of section (2) of this rule.

(4) Opacity is determined in accordance with the procedures specified in the definition of "opacity".

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.

Stat. Auth.: ORS 468 & 468A

Stats. Implemented: ORS 468.020 & 468A.025

Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0015; DEQ 2-2001, f. & cert. ef. 2-5-01; DEQ 8-2007, f. & cert. ef. 11-8-07

Fugitive Emission Requirements

340-208-0200

Applicability

OAR 340-208-0200 through 340-208-0210 apply:

(1) Within Special Control Areas, designated in OAR 340-204-0070; and

(2) In other areas when the department determines a nuisance exists and should be controlled, and the control measures are practicable.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0055; DEQ 2-2001, f. & cert. ef. 2-5-01

340-208-0210

Requirements

(1) When fugitive emissions escape from a building or equipment in such a manner and amount as to create a nuisance or to violate any regulation, the department may order the owner or operator to abate the nuisance or to bring the facility into compliance. In addition to other means of obtaining compliance the department may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that air contaminants are controlled or removed before being emitted to the open air.

(2) No person may cause or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but not be limited to the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

(b) Application of asphalt, oil, water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;

(c) Full or partial enclosure of materials stockpiles in cases where application of oil, water, or chemicals are not sufficient to prevent particulate matter from becoming airborne;

- (d) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- (e) Adequate containment during sandblasting or other similar operations;
- (f) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
- (g) The prompt removal from paved streets of earth or other material that does or may become airborne.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.025

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0060; DEQ 2-2001, f. & cert. ef. 2-5-01

Nuisance Control Requirements

340-208-0300

Nuisance Prohibited

- (1) No person may cause or allow air contaminants from any source subject to regulation by the department to cause a nuisance.
- (2) Upon determining a nuisance may exist, the department will provide written notice to the person creating the suspected nuisance. The department will endeavor to resolve observed nuisances in keeping with the policy outlined in OAR 340-12-0026. If the department subsequently determines a nuisance exists under 340-208-0310 and proceeds with a formal enforcement action, pursuant to chapter 340 division 12, the first day for determining penalties will be no earlier than the date of this notice.

Stat. Auth.: ORS 468, ORS 468A.010 & ORS 468A.025

Stats. Implemented: ORS 468A.010 & ORS 468A.025

Hist.: DEQ 2-2001, f. & cert. ef. 2-5-01

340-208-0310

Determining Whether A Nuisance Exists

- (1) In determining a nuisance, the department may consider factors including, but not limited to, the following:
 - (a) Frequency of the emission;
 - (b) Duration of the emission;
 - (c) Strength or intensity of the emissions, odors or other offending properties;
 - (d) Number of people impacted;
 - (e) The suitability of each party's use to the character of the locality in which it is conducted;
 - (f) Extent and character of the harm to complainants;

(g) The source's ability to prevent or avoid harm.

(2) Compliance with a Best Work Practices Agreement that identifies and abates a suspected nuisance constitutes compliance with OAR 340-208-0300 for the identified nuisance. For sources subject to 340-216-0020 or 340-218-0020, compliance with specific permit conditions that results in the abatement of a nuisance associated with an operation, process or other pollutant emitting activity constitutes compliance with 340-208-0300 for the identified nuisance. For purposes of this section, "permit condition" does not include the general condition prohibiting the creation of nuisances.

Stat. Auth.: ORS 468, ORS 468A.010 & ORS 468A.025

Stats. Implemented: ORS 468A.010 & ORS 468A.025

Hist.: DEQ 2-2001, f. & cert. ef. 2-5-01

340-208-0320

Best Work Practices Agreement

(1) A person may voluntarily enter into an agreement with the department to implement specific practices to abate the suspected nuisance. This agreement may be modified by mutual consent of both parties. This agreement will be an Order for the purposes of enforcement under OAR 340 division 12.

(2) For any source subject to OAR 340-216-0020 or 340-218-0020, the conditions outlined in the Best Work Practices Agreement will be incorporated into the permit at the next permit renewal or modification.

(3) This agreement will remain in effect unless or until the department provides written notification to the person subject to the agreement that:

(a) The agreement is superseded by conditions and requirements established later in a permit;

(b) The department determines the activities that were the subject of the agreement no longer occur; or

(c) The department determines that further reasonably available practices are necessary to abate the suspected nuisance.

(4) The agreement will include one or more specific practices to abate the suspected nuisance. The agreement may contain other requirements including, but not limited to:

(a) Monitoring and tracking the emission of air contaminants;

(b) Logging complaints and the source's response to the complaint;

(c) Conducting a study to propose further refinements to best work practices.

(5) The department will consult, as appropriate, with complainants with standing in the matter throughout the development, preparation, implementation, modification and evaluation of a Best Work Practices Agreement. The department will not require that complainants identify themselves to the source as part of the investigation and development of the Best Work Practices Agreement.

Stat. Auth.: ORS 468, ORS 468A.010 & ORS 468A.025

Stats. Implemented: ORS 468A.010 & ORS 468A.025

Hist.: DEQ 2-2001, f. & cert. ef. 2-5-01